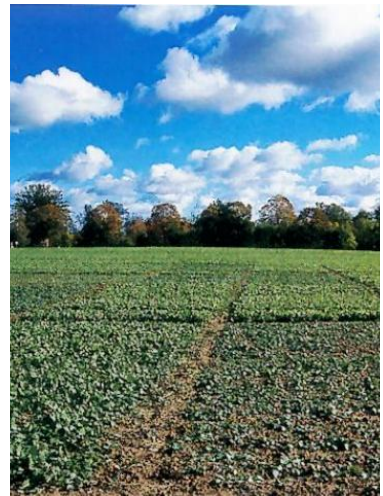


# Services for Plant Breeding and Agriculture



Green House  
Field Trials  
Laboratory

Groß Lüsewitz, Germany

# Field trials

We perform variety trials, plant protection product and fertilizer trials. Our service comprises design of experiments, planting, maintenance, harvest as well as evaluation. We are approved due to and work in accordance with GEP guidelines.

We lay out our trials rotating in a closed trial garden.



## Site specification

<b>Administrative district:</b>	<b>Bad Doberan</b>
<b>Commune:</b>	<b>18184 Thulendorf</b>
<b>Cadastral district:</b>	<b>Klein Lüsewitz</b>
<b>Site size:</b>	<b>46,5 ha</b>

The site is located in the Baltic Sea climate region, with a yearly average temperature of 6,9 °C, the rainfall amount ranges between 580 - 640 mm per year. The height above sea level is ca. 50 m. The predominant wind direction is from West to East. The trial site due to its topographic position is not located in a flood area.

## Soil description

Soil type: loamy sand  
Soil category (German Ackerzahl): 42  
Natural location type: D3b2 (Soil formation Sand loam – Brown Staugley)

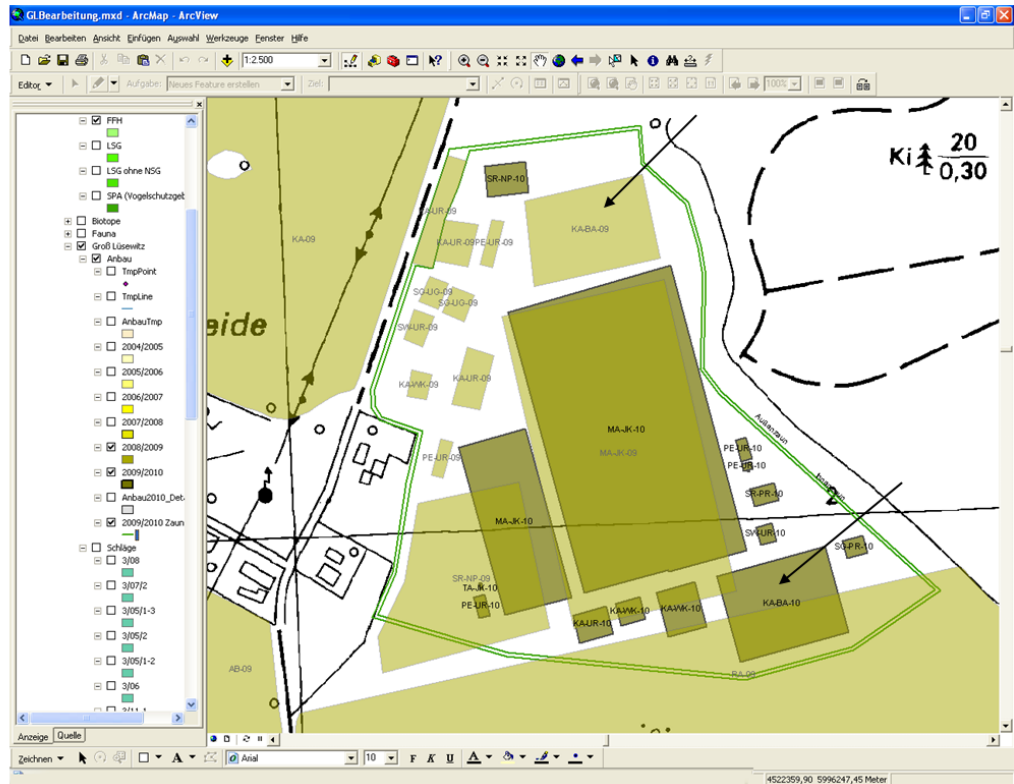
## Our equipment

Machine	Type	Short description
Compact tractor	John Deere 4520	
Tractor	Lambo RZ 100GS	
Plot drilling machine	Innotec	Disc coulters, seed distribution, Working width: 1,50 to 10 rows
Precision drilling machine	Baural	Pneumatic, up to 3 rows, disc coulters
Potato planting machine	Grimme	Double row, for pre-germinated tubers
Ridge former for potatoes	Grimme	Double row
Plot fertilizer spreader	Fiona D-78 BHA	Working width: 1,50 m
Filed sprayer	Bargam MEC 300l	Working width: 12 m
Cultivator	Fiona	Working width: 3 m
Rotary harrow	Alpego	Working width: 1,50 m
Plot combine harvester	Zürn 150	Working width: 1,50 m
Corn chopper		Single row, weighting system, transfer conveyer
Potato harvester with transverse conveyer	Uniropa	Single row
Vibration screen potato harvester		Single row, tuber deposition backwards
Halm topper	Grimme	Row width 75cm
Mulcher	Muratori	Working width:1,50 m
Milling machine		Working width:2,50 m



# GPS measurement and Documentation

Stabrover  
Accuracy < 2 cm



## Security



The trial garden is enclosed by a double fence. During vegetation period it is guarded 24 hours around the clock.



# Green house and und plant chambers



To perform cultivation in soil we have

- 800 m<sup>2</sup> green house area
- Plant chambers to simulate certain environmental conditions

Our sterile working space is equipped with

- Culture medium kitchen with autoclaves of different size
- Various sterile clean benches
- Plant chambers of different sizes

We are experienced in cultivating potatoes, maize, cereals, oilseed rape, tobacco, carrots, sugar beets and also special crops like Arabidopsis or petunia



# Laboratory

## DNA Analysis

### Qualitative Test

Screening for genetically modified components (GMO components yes/no)

### Quantitative Test

## RNA Analysis

Development of assays to determine specific transgen encoded RNA

## Protein Analysis

Determination of total protein content due to Bradford



## Soil analysis

Soil examination for several compounds

## Plant specific tests

Examination of seeds and harvested plant material

Compounds: i.e. starch, amylose/ amylopectine,  
diseases: i.e. viral diseases

## Contact

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